

Book Review

MARINE MAMMAL RESEARCH: CONSERVATION BEYOND CRISIS. Editors: J. E. Reynolds III, W. E. Perrin, R. R. Reeves, S. Montgomery, and T. J. Ragen. The Johns Hopkins University Press, Baltimore, MD, USA. 2005. ISBN 0-8018-8255-9. 223 pp.

The U.S. Marine Mammal Commission (MMC) is charged to provide independent oversight of the marine mammal conservation policies and programs being carried out by U.S. federal regulatory agencies. In the past fifteen years, its chair, John Reynolds, has championed the thoughtful release of quite a few publications that mesh good science with calls for integrated conservation strategies, with the latest being this book. In 2002, the U.S. Congress mandated that the MMC provide a means to make suggestions on guiding marine mammal research. A steering committee decided that the focus should be on threats. A meeting of experts was held in 2003, and this well-edited informative book is the result.

The book covers important conservation issues of marine mammals; there are 12 chapters, and seven of these deal directly with threat issues. These are "Bycatch and Depredation" (depredation is marine mammals harming fisheries and the harm that may come to them as a result) by Andrew Read; "Indirect Fishery Interactions" by Éva Plagányi and Doug Butterworth; "The Role of Infectious Disease in Influencing Status and Trends" by Frances Gulland and Alisa Hall; "Assessing Impacts of Environmental Contaminants" by Todd O'Hara and Thomas O'Shea; "Effects of Harmful Algal Blooms" by Frances Dolah; "Impacts of Anthropogenic Sound" by John Hildebrand (I found this chapter especially timely, well-done, and an excellent primer on sound-related problems in the oceans); and "Long-Term Environmental Change and Marine Mammals" by Sue Moore. Other contributions are a short and well-done first chapter by John Reynolds that serves to set the stage in a historic context; a discussion of assessing and managing marine mammal habitat in the U.S. by Timothy Ragen; the need for identifying the units or levels of type and space of animals to conserve by Barbara Taylor; the need for regulations to be adaptive and forward-looking relative to changing conditions by Daniel Goodman; and a discussion of "Future Directions in Marine Mammal Research" by Timothy Ragen, Randall Reeves,

John Reynolds, and William Perrin. Each chapter gives advice on what to know and what research needs to be done for better information.

The book does not cover all threat subjects by the editors' admission and explanation. Thus, only short shrift is given to the growing problem of "dead zones" of anoxic conditions in some coastal waters such as the summer dead zone in the northern Gulf of Mexico; ship strikes in busy shipping lanes such as the problem of especially northern right whales being hit in the western North Atlantic; oft-detrimental human interactions between growing pinniped populations and growing coastal human populations such as sea lions and elephant seals wanting to use the same space as humans (and not necessarily smelling and barking agreeably to our senses); and the continuing practices of indigenous people as well as the industrial concerns of whaling and sealing in various parts of the world.

The book is, as was the intent of the workshop and the editors, biased towards discussions of the need for integrated and informative research as related to threats. As a result, it gives less attention to the power of research and the evolution of sophistication of research per se. I am of the strong opinion that all good research has potential (and, at times, powerful) relevance for conservation and management issues, and the mere acquiring of information, even of presently and foreseeably "robust" species and ecosystems, is of intrinsic value, not just for the pure sake of knowledge, but for conservation as well. As a matter of fact, the two are inextricable. As well, political managers may "call for" particular research or research goals (and may, by selective funding, influence at least short-term studies of certain systems and species), but our progression of studies of marine mammals and their ecosystems will continue without advice from colleagues and managers. Instead, scientists in general may use the content of this book as milestones (or kilometer markers) of performance, but they are unlikely to change their research protocols and priorities as a result. I am confident that the authors and editors realize this and that this text is (1) intended to be informative relative to the state of present day threats and scientific knowledge, and (2) to be used to help guide government entities, nongovernmental organizations, and other concerns relative to political pressures, funding avenues, and the like. In these intentions, the book succeeds very well.

The flavor of the book has a bit of probably purposeful regionalism. Despite consultation and coordination with researchers working in ecosystems outside the U.S. and Canada, there is a strong theme of “American” politics, even with specific mention in the penultimate paragraph of the book (!) of only the (U.S.) National Marine Fisheries Service (NMFS) and (U.S.) Fish and Wildlife Service as taking major burdens of marine mammal research. The bias is understandable because the thoughts in this book grew out of a mandate by the U.S. government (and 4 of the 5 editors work for the U.S. government), but such regionalism does tend to downplay the often astounding research and conservation/management progress from which all can benefit that governmental and nongovernmental entities from Canada, Mexico, Argentina, New Zealand, Australia, South Africa, Italy, and the UK (to name several but not all major players) have and will continue to make towards protection strategies of marine mammals. I work much in New Zealand, and I know firsthand that the Department of Conservation there is highly advanced in interfacing wise research, habitat use problems by multiple marine mammal species and human players, and regulations and their enforcement. The U.S.-based NMFS (for example) could learn much from them.

My minor quibbles above notwithstanding, this is a thoughtfully written and edited compendium, and I will be using aspects of just about every chapter in my undergraduate and graduate courses on marine mammal biology. I also would recommend it as a text for a class in conservation issues of marine mammals, to be supplemented with other readings to give it a more worldwide flavor. By all means, it deserves to be on the shelf of every serious marine mammalogist researcher, and should become well-thumbed.

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